DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028400
Date Inspected: 15-Sep-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: jobsite

CWI Name:	Scott Kortum			**CWI Present:**	☑ Yes	☐ No		
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: OBG

Summary of Items Observed:

Quality Assurance inspector (QA) Matthew Daggett was at the American Bridge/Fluor (ABF) job site at the San Francisco/Oakland Bay Bridge in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

This QAI regularly observed the welder Richard Chouinard grinding to a bright clean metal condition an excavation at the following location on Floor Beam Bottom Flange Splice 13W-PP123.5-W2.2-BF-2:

Member Face Y Location in mm Width in mm Depth in mm Length in mm
B 60 20 10 90
B 180 30 15 130
B 410 20 15 120

Prior to welding Quality Control Technician Scott Kortum performed Visual and Magnetic Particle Testing on the above excavations. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

The welder spent part of the shift depositing the root passes and fill passes with approximately 100% being completed at the end of the shift. QC inspector Kortum was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1001 Rev 0 and supporting Procedure Qualification Records (PQR). Prior to and during the

welding at this location the QC inspector observed the preheat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the pre-heat was then verified by this QA inspector to be greater than 150F. Using a Fluke brand Tong style meter, the parameters were verified to be 121 amps

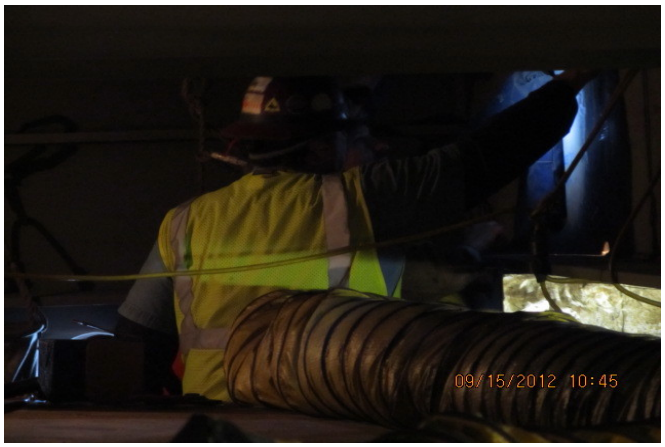
This QA inspector observed weld repair being performed by ABF welding personnel Richard Garcia on Deck Splice 13W-W2.3, at the following location(s):

Y: 2530mm, L: 1500mm, W: 60mm, D: 12mm

This QA Inspector observed Mr. Garcia preheating to a QC recorded, QA verified temperature of 250F prior to using the Carbon Arc Gouging process to remove defects at the above-mentioned locations on the Splice. The locations and depth of the defects had been marked on the steel by the Ultrasonic Technician at the conclusion of his testing. At the end of gouging operations Mr. Garcia ground the excavations to a bright clean metal condition in preparation of Visual, Magnetic Particle Testing, and welding.

Prior to welding Quality Control Technician Scott Kortum performed Visual and Magnetic Particle Testing on the above excavations. This Quality Assurance Inspector verified the results of the test by doing duplicate testing to the excavations. No indications were noted.

The welder spent a fraction of the shift depositing the root passes and fill passes with approximately 100% being completed at the end of the shift. QC inspector Scott Kortum was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D15-1004R (Rev 0) and supporting Procedure Qualification Records (PQR). Prior to initiating the welding at this location the QC inspector observed the preheat temperature and post heat temperature using a Raytek non-contact Thermometer, was sufficient and compliant to the above-mentioned WPS. Using a Tempil Stick, (temperature indicating crayon) the preheat, and post heat temperature was then verified by this QA inspector to be greater than 350Fand 450F respectively. Using a Fluke brand Tong style meter, the parameters were verified to be 133 amps



WELDING INSPECTION REPORT

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Summary of Conversations:

There were general conversations with Quality Control Inspector Scott Kortum, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Danny Reyes and Bill Levell.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Daggett,Matt	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer